

IS MUSIC CONSCIOUS?

Is music conscious? The argument from motion, and other considerations

Kevin O'Regan

©American Psychological Association, 2017. This paper is not the copy of record and may not exactly replicate the authoritative document published in the APA journal. Please do not copy or cite without author's permission. The final article is available, upon publication, at:

<http://dx.doi.org/10.1037/pmu0000198>

Published in *Psychomusicology: Music, Mind and Brain*, Volume 27, Issue 4 (2017), pp. 327-333. Please quote from the published version.

Author Note:

Kevin O'Regan, Norwich, UK.

Work in this article was disseminated at the 5th International Conference on Consciousness, Literature and the Arts at the University of Lincoln, UK in June 2013, and at the Royal Musical Association 50th Annual Conference at the University of Leeds, UK in September 2014. The Music and Letters Trust kindly defrayed conference expenses for the University of Lincoln conference.

The author thanks David Clarke, Katherine Hawley, Christopher Peacocke, Nina Penner, Clive Scott and two anonymous reviewers for this journal for helpful comments on previous versions of the manuscript.

IS MUSIC CONSCIOUS?

Abstract: Music is often described in anthropomorphic terms. This paper suggests that if we think about music in certain ways we could think of it as conscious. Motional characteristics give music the impression of being alive, but musical motion is conventionally taken as metaphorical. The first part of this paper argues that metaphor may not be the exclusive means of understanding musical motion – there could also be literal ways. Discussing kinds of consciousness, particularly “access consciousness” (Block 1995), the second part proposes ways in which music could (hypothetically) be conscious. The conclusion states that a greater understanding of the interactions of “phenomenal consciousness” and “access consciousness” is important in conceptualizing non-human consciousnesses, such as music might be conceived to be.

Keywords: *Agency; Animacy; Anthropomorphism; Consciousness; Musical Authorship; Music’s Personhood*

Introduction

Since its beginnings the precise nature of music has confounded human thought. In a sense, music is not just the soundtrack to our lives, but an “other” who speaks “to” as well as “alongside” us (cf. Park 2013). We often *anthropomorphize* music as an independently functioning being, but stop short of thinking of music as *actually conscious*. Consciousness is mysterious – it is even a mystery what motivates us to ascribe consciousness to anything outside ourselves (Arico, Fiala, Goldberg & Nichols, 2011). Lloyd (2011, 2013), interestingly, has shown that the dynamic-temporal systems of brain consciousness, as revealed by fMRI, are more nearly related to musical than to linguistic structures. If, as such studies argue, music promisingly assists in the characterization of the neurophenomenological environment and its processes, there is the possibility of thinking the other way around, that the nature of music has an affinity with consciousness. The object of this paper is to argue that if we think about music in certain ways we could conceive it as conscious. In doing this the paper hypothesizes what actual musical consciousness would look like.

Why would considering music as conscious be worthwhile? It would enable us to make sense (as we ought to do) of our anthropomorphic conceptions of music. And it would offer a more complete picture of how we habitually think and feel about it, for example concerning its wordless power. We would also enhance how we experience music. Music performance pedagogy, for example, would benefit from considering musical notes and works as having consciousness: we could bring music “to life” in performance even more by conceiving that life in a literal sense.

IS MUSIC CONSCIOUS?

Creators of musical works – such as composers and improvisers – could understand more deeply and interpretively how pitches, rhythms and other musical elements behave in a work, by considering their consciousness (some analysts already do this to an extent). As musical practitioners, humans have engaged with music indirectly (especially in utilizing *metaphor* to capture its meaning). Considering music as conscious could afford a more direct engagement with it and enable more to be discovered about both it and us.

The claim that we could conceive music as conscious (thinking about it in certain ways) has two elements. The first is that our ordinary experience of music is so intimate and personal that in order to justify it we need a concept of music as conscious, an *as-if* way of speaking about musical consciousness. The second, more tentative element is that music could *of its nature* be conscious. This would mean connecting music and consciousness ontologically. The claim overall is discussed from the perspective of philosophy, with some support from the disciplines of psychology and neuroscience. Taking consciousness as something humanly experienced that we are still trying to understand, the issue of conceiving music as conscious is acute because we are considering what it would be like to be something that is obviously unlike us. For here we must want to know not what it would be like for us to be the thing in question but what it would be like for the thing to be itself. Consciousness may exist in infinite, unimaginable ways, that is, there may be forms of its existence whose precise nature is (currently) beyond the grasp of our reason (Nagel 1974).

IS MUSIC CONSCIOUS?

How could music be conceived as conscious? One of its most important characteristics is motion, which in animate entities indicates the presence of life. However, the concept of motion in music as occasioning its consciousness raises questions. This is because musical motion is habitually taken as metaphorical, therefore to use music's motional properties to assert its consciousness is to use properties that are constructed by the listener's perceptual system, not by the music itself. Part 1 of this two-part paper, therefore, addresses the important issue of musical motion as being metaphorical. Part 2 aims to theorize and stimulate debate around what attributing actual consciousness to music would look like, and assembles brief theses with hypothesized scenarios in which music is an active, even sentient player able to offer first-person testimony of its own vitality - a consciousness co-equal to biological consciousness.

Part 1: Musical motion – metaphorical or literal?

Animacy, agency and metaphor

A musical texture is the copresence of sounds arranged according to some or all of their physical properties (such as frequency, amplitude, intensity, spectrum, duration, envelope, modulation, and reverberation). Musical motion is generally seen as resulting from cooperation between elements from perceptual properties – such as pitch, harmony, rhythm, and dynamics – arising from these physical properties, which, while nonmotational in themselves, can, when manipulated by the composer, create a lifelike texture (cf. Miller 1983, pp. 59-60). This underlies contemporary descriptions in music theory of elements of music as agents or actors that produce particular effects (Tarasti 1991; Hatten 2015; Thumpston 2015). Motion can occur in respect of both inanimate and animate entities. An apple has motion when it falls from a tree, but the motion of animate entities is generally self-movement presupposing agency. In the case of putative musical consciousness, it is the latter kind of motion that is of most interest. However, properties, such as ascent or descent of pitch, which appear to induce a sense of musical motion, seem to be metaphorical constructs by composers, performers and listeners. As such, they are not therefore part of an autonomous entity and cannot be used to indicate the consciousness of music.

Metaphorical and literal musical motion

Metaphorical musical motion

IS MUSIC CONSCIOUS?

Nonmotional properties, such as melody, harmony, rhythm and dynamics, and, in some musical performances, space (spatial transfer of sound, as in antiphonal singing), while nonmetaphoric, are perceived, in a metaphorical way, as motional properties. A change of pitch, for example, is said to cause a change of direction in the music and thus to occasion the perception of motion. Eitan and Granot (2006) found that changes in most nonmotional properties of a given segment of music generate changes in how listeners associate that segment with imagined human movement when invited to do so. For example, when the pitch contour of a melody was altered, listeners perceived that the imaginary human figure moved in fresh spatial directions and with a different speed and energy. The argument frequently made from such findings is that changes in the physical characteristics of the nonmotional property of pitch contour (its up- or down-ness, its smooth- or jaggedness, its evenness or disjunction) undergo metaphorical transfer to the domain of the specification of how the human body moves in space and time. When the transfer is done, the original nonmotional properties become re-presented as motional properties. These new motional properties, it is argued, have been constructed by the listener from imagination having metaphor at its root.

Such findings and their metaphorical explanations are interesting and forceful. The framework of metaphorical cognition (the mind reasoning via the concept of metaphor) is therefore not to be ignored. Cognitive, or conceptual, metaphor theory (CMT), for example, argues that “most of our ordinary conceptual system is metaphorical in nature” (Lakoff and Johnson 2003, p. 4). Thus lying behind much ordinary language is a governing *conceptual metaphor* acting as master

IS MUSIC CONSCIOUS?

narrative. For example, the sentence “his criticisms were right on target” is ordinary language instantiating the conceptual metaphor *argument is war*. This and other conceptual metaphors, according to CMT, are inherent in our cognition.¹

Proponents of CMT in music theory and philosophy accept that actual motion in music is a *belief* on the part of the listener that is validated only by “the metaphoric logic that maps actual spatial relations onto the relations of musical events” (Cox 1999, p. 204). Assisted by Cox’s work, Johnson and Larson (2003) argue for specific metaphors of musical motion, notably the Moving Music metaphor, in which “a musical event is conceptualized as an object that moves past the stationary hearer from front to back” (p. 69). Johnson and Larson briefly note (p. 70) that utilizing this metaphor gives the impression that there is some object in music that actually moves whereas (because the frame is metaphorical) this is in fact not the case. In CMT to ask what in music actually moves misplaces the whole issue – the best that can be said is that our experience of music shares something with our experience of seeing objects move in physical space. The identified metaphors of musical motion (especially the Moving Music metaphor) institute systems of mappings that, though “systematic” (p. 69), are complex in such a way as not to be able (or want to) specify the origins of musical motion. It appears that in such systems it is not reasonable to think of something as actually moving in music. This is because in order conceptually to access the realm of musical motion in the first place it is necessary to utilize cognitive metaphorical mappings, and the nature of metaphor precludes actual motion being applied to music, which is conceived ultimately as inorganic. In

IS MUSIC CONSCIOUS?

other words, our perception of motion in music, though vivid, remains only a perception that is derived simply from metaphor as the basis for cognition.

Literal musical motion

How, nonetheless, could we think of the motional properties of music as nonmetaphoric? A detailed exploration of philosophical ways of supporting this idea is outside the scope of this paper. One answer to be mentioned here is that, while the CMT account put forward especially by Cox (1999), and Johnson and Larson (2003) discusses musical motion impressively and in detail, there is still the query that it is far from clear that “metaphor”, in the locution “metaphorical musical motion”, has a uniform meaning. A basic precept of the cognitive approach to metaphor is that it is no longer viable to speak of metaphor as simply a rhetorical device – it is instead deeply involved in actual cognition (Kassler 1991). What this appears to have done, however, is remove the rhetorical function from metaphor entirely and replace it with an exclusive concept of process linear mapping from source to target domains. The mappings that result constitute the specific cognitive content of the metaphor that enables conceptualization but not direct apprehension of the object of inquiry (in this case, musical motion). However, in a much-discussed paper Davidson (1978) famously and pertinently argues (in contradistinction to the claims of Lakoff and Johnson, 2003) that, however metaphors work, they do not do so by virtue of having a “special cognitive content”. Though Davidson does not deny that a metaphor has a point that can be explained using further words, he does deny that either metaphor or metaphor-maker says anything beyond the literal meaning

IS MUSIC CONSCIOUS?

of the words comprising the metaphor.² There are various details in Davidson's controversial paper that enable a reading of the case of musical motion such as the following: Musical motion is a metaphor that means music moves. We have to make a metaphor about the action of music but even when we do so we end up saying that music moves. There is no other, metaphorical sense of musical motion apart from the literal. To say, metaphorically, that music moves is not to say anything about music beyond its moving. It is, of course, to say that there is a point to saying that music moves, and that this point can be brought out by using further words. The point in saying that music moves is what these words *do*. To say that music moves is not to give the movement of music a special meaning, it is to say that there is an action associable with music moving.

What Davidson's argument in particular suggests is that the meaning of "metaphor" as it occurs in the expressions "metaphorical musical motion" or "metaphorical cognition of musical motion" is subject to interpretation. While it may be possible to argue that metaphor is deeply involved in cognition, arguing in this way does not necessarily mean that uncertainties surrounding the meaning and function of metaphor are removed. It is thus doubtful whether an account of the meaning of "metaphor" in these expressions can just be separated from rhetorical analyses of metaphor such as Davidson's. If this meaning is wider than in the source-domain mapping-oriented CMT account, the access it is thought metaphor offers to cognitive realms otherwise considered inaccessible (such as musical motion) must be qualified by acknowledging the connection of metaphor with literality. We can, therefore, at least think about literalist accounts of musical motion.

Part 2: Into musical consciousness

Empirical evidence

How could we evidence the consciousness of music? In reconceptualizing what it is like to be something that is unlike us, we would have to envisage the nature and process of evidencing for such a reconceptualization. If music were conscious, its consciousness would appear not to be *reportable* and hence it would obviously be difficult to get empirical evidence. Baars (1994) argues that general empirical principles for discerning consciousness can be deduced from categories of contrasting pairs of conscious and unconscious experiences. In each pair, two things are compared that are very similar except that one is conscious and one is not, and this enables the isolation of features associable with consciousness. For example, in spontaneous problem-solving the stage of definition of the problem belongs to conscious experience, the intermediate processes that go towards solving it are unconscious, and the “eureka” moment when the solution to the problem appears to us is once again conscious. By considering these experiences as ranged on the two extremes of the consciousness spectrum (“conscious” or “unconscious”), relevant empirical data emerge to suggest whether something is conscious. It might (hypothetically) be possible to utilize Baars’s empirical approach of contrastive analysis to evidence the consciousness of music by ranging music along the consciousness spectrum with other phenomena. On the other hand, Gamez (2014) asserts that unreportable consciousness would undermine contrastive analysis. The difficulty might be avoided by postulating that music’s active and continuous juxtaposition (rather than discrete eventuation) of sounds and silences would

IS MUSIC CONSCIOUS?

constitute a report. In the case of biological consciousness the act of reporting occasions a fluctuation in consciousness (Frith, Perry & Lumer, 1999). Whether a conscious music would do this would be a matter for further exploration and experimentation (if there was empirical progress).

What kind of consciousness?

Fundamental to consciousness is the *awareness* of something. Awareness is, however, not limited to the level of the immediate access provided in primary forms of experiencing. Mandik (2010) expounds a “second-order” awareness called *control consciousness*, the awareness or experience of seeming in control of one’s actions. Also, Dretske (2003) notes the problem of how we are aware that we are aware of things (this is not the same as the question of how we are aware of what we are aware of). Objects and properties do not themselves obviously carry information about this second-order awareness. Dretske, while not offering a definitive answer, thinks that in this case some kind of introspection occurs. What is significant about this problem is that it is relevant wherever consciousness is attributed.

A prominent category of consciousness, *phenomenal consciousness* (P-consciousness) stems from what-it-is-like-ness (Nagel 1974). A neurophysiological definition of P-consciousness is the presence of correlated neural activity in the sensory cortex of between 35 and 75 Hz (Crick & Koch 1990). In the important account by Block (1990, 1995) a P-conscious state is one that has experiential properties (in classical sense datum theory, properties defining our experiences of perceptual objects having shared characteristics – the redness of red objects, for

IS MUSIC CONSCIOUS?

instance [cf. Shoemaker 1994, p. 22]), the total of which make up what it is like to have that state. P-conscious states can involve perception, sensation, feeling, thought, desire and emotion.³ For example, we have P-conscious states when we perceive through seeing, tasting, or smelling, and when we sense through having pain. A non-phenomenally conscious state Block (1995) calls *access consciousness* (A-consciousness). An A-conscious state is one that is “poised” for use in reasoning, action and speech. The states typical of A-consciousness are “propositional-attitude” states, that is, states with representational content (content predicated of an external object) expressed by “that” clauses, for example the thought *that p*.⁴ A further idea of P-consciousness and A-consciousness is obtained by considering both how they can occur separately from each other and how they can interact. We can be P-conscious of a pneumatic drill by *being aware of* and *experiencing* its sound and vibration for some time before becoming A-conscious that it is in fact a pneumatic drill (P-consciousness without A-consciousness). In the reverse case, someone with blindsight (the ability of a patient, who is blind due to lesions in her primary visual cortex, to react to visual stimuli that she does not consciously see) who “guesses” that there is one letter in her visual field rather than another is A-conscious of the guessed letter without any P-consciousness (A-consciousness without P-consciousness). The content of a P-conscious state (P-conscious content) is *phenomenal* (capable of being known experimentally or observationally) while the content of an A-conscious state (A-conscious content) is *representational* (predicated of an object in the external world). As Block puts it, “the content of an experience can be both P-conscious and A-conscious, the former in virtue of its phenomenal feel and

IS MUSIC CONSCIOUS?

the latter in virtue of its representational properties" (1995, p. 232). Two further principal concepts of consciousness accruing from P-consciousness and A-consciousness are *self-consciousness* and *monitoring consciousness*. Self-consciousness is possessing a self-concept and being able to use it in thinking about oneself. Monitoring consciousness internally *perceives* (in a way similar to P-consciousness) or *scans* the conscious states one is in. At a higher level it can be a conscious state that includes the thought that one is in that state.

Theses

The following exploratory theses offer scenarios of musical consciousness, relying on the idea that *holding thoughts or attitudes* indicates consciousness. The theses are necessarily speculative and fragmentary, because of the inherent difficulties in the subject matter of this paper, but they are intended to present intuitive reasoning that will enable clearer discussion of this subject matter. The concept of *reflexivization* – that music could take reflexive attitudes, towards itself – is proposed. Some previously mentioned concepts of consciousness which bear on reflexivization are: *control consciousness*, *access consciousness*, *self-consciousness* and, to an extent, *monitoring consciousness*. These are mostly states concerned with the organism's self-regulation of its mental environment and awareness. In trying to understand what it would be like for music to *take an attitude*, these concepts are relevant, because, in indicating what it is like to be *us*, they point towards an analogous conception of what it is like for music to be music and even towards a grasp of the unimaginable state of music being itself.

Thesis 1 – Fictionalist intentionalism and *reflexivization*

The power of music means we enter into a personal relationship with it that is not just a sociocultural construction (cf. Parncutt & Kessler, 2007) but one dependent on understanding music really as personal and having personal functions (cf. Watt & Ash, 1998). In order to consider music's personhood in terms of a conscious capacity to *think* and to *insinuate its own thoughtfulness*, what is important is whether the attribution of some kinds of *attitudes* to music would be true or false. Truly attributed, these attitudes could be *reflexivizations*, or introspective activities, of music turning towards its own nature. Livingston (2005, p. 165) gives a markedly sceptical account of interpretation that "frames ideas about the attitudes expressed in the work [of art], but does so without asking whether those attitudes were in fact intentionally made manifest by anyone", which he terms "fictionalist intentionalism". In fictionalist intentionalism, there is an origin, of putative attitudes or intentions in the work, which seems real or is even probable, but is not the agent who created the work (p. 140). But, notwithstanding scepticism, it is precisely this that has significant potential for understanding music's meaning, and the introspective activity here termed *reflexivization* is an active offshoot of considering music as fictionally intentional.

Thesis 2 – Music as personality: beyond implication

Despite themselves, writers such as Cone (1974) and Maus (1991) flirt with the fascination of what it would mean to describe music anthropomorphically. Cone reduces the idea of personifying music to a theory based on implication (music as an implied person), but uses powerful language to do so. He says (1974, p. 3) that “the expressive power of every art depends on the communication of a certain kind of experience, and...each art projects the illusion of the existence of a personal subject through whose consciousness that experience is made known to the rest of us.” For Cone, the idea of impersonation is key to the reality of music – music depends on implied personation. Cone identifies the “speaking voice” of music as a kind of consciousness called the *implicit musical persona*, which he says “is by no means identical with the composer; it is a projection of his or her musical intelligence, constituting the mind, so to speak, of the composition in question” (p. 57). This is fascinating territory: what would it mean for something to “constitute the mind” of a composition? What would that something have to be like? Cone postulates “a spontaneity that seems to inhere...in [the activity of] the music itself. The music will then appear to live its own life, so to speak – to compose or think through itself” (p. 63). How might this “spontaneity” be characterized? What might music’s ability to “think through itself” consist of? How can music “live its own life”? Music has *life*, certainly, it is frequently acknowledged, but how does it *live* that life? Engaging with questions such as these provides new suggestions that the referential field of music can be broadened from the familiar categories of real-world sound analogues and human emotions to thought itself. As Cone puts it, in his analysis of Berlioz’s second programme for the *Symphonie Fantastique*, music’s “field is the inner life of the

IS MUSIC CONSCIOUS?

experiencing subject”, the content of which is “no less than a symbol of musical content itself” (p. 86).

Thesis 3 – Agency and authorship

Authorship underlies how a conscious music could *act*. In a mysterious-sounding passage from his precise definition of personhood, Hobbes (1996, p. 108) says: “But things inanimate, cannot be authors, nor therefore give authority to their actors: yet the actors may have authority to procure their maintenance, given them by those that are owners, or governors of those things. And, therefore, such things cannot be personated, before there be some state of civil government”.

Notwithstanding Hobbes’s denial of authorship to “things inanimate”, music is often deemed as being *an actor* or *composed of actors*. In this we usually consider that music behaves as we do by performing, for example, feats of movement (such as acceleration and deceleration) and direction (such as up and down), considering what it is like for music to be us rather than be itself. Supposing music does have reflexive *attitudes* that self-comment on its own nature, do they bear an *authorial relationship* to music, in that the attitudes *author* music by “owning” it? We may often think of the relationship the other way around, that music is itself authorial by virtue of its supreme pervasiveness, through which it almost “owns” everything it touches (this fits with Romantic or formalist principles that there is no room for anything other than music itself). If we intuit that music as a phenomenon has *intention* we could attribute a layer of consciousness to it. Thus we could adapt Hobbes’s

IS MUSIC CONSCIOUS?

qualification that “actors” (that is, music) may “procure the maintenance [asserted truth]” of “things inanimate” (even if, in Hobbes’s terms, the latter, in the shape of attitudes, cannot be authors). In other words, inanimate things, or their concepts, can be upheld by actors who receive authority to do so from whoever (or whatever) owns these things. Could music be “authored” by extramusical attitudes that are reflexivizations on its own self, such that it even “embodies” these attitudes? Music is instead habitually read in such a way that its author is absent (cf. Barthes 1968).

Thesis 4 – The significance of reflexivization

To think metaphorically about music is to think that because meaning in music can reside only in unintelligible signs (musical notes) it is, in order that it can be talked about, *carried across* to another domain. Somehow, purely musical meaning exists *in* the notes, but, because it cannot be talked about *in terms of* meaning as such, it is redundant. So it must be metaphorical. But if music were conscious, it could tell itself things. It could *self-comment*, to itself. Its self-commentary would be reflexive and recursive, coming from its consciousness.

We disdain music due to our drawing back, our refusal to consider the union of its nature – fragmented, and eked out by us in figural descriptions – into self-awareness. But, if conscious (or even in our ordinary, or anthropomorphic, ways of speaking about it), music itself disdains our disdaining of it. This kind of process evokes what Bakhtin defines as the “second stage of objectification”: “[I]t is also possible to reflect our attitude towards ourselves as objects...In this case, our own

IS MUSIC CONSCIOUS?

discourse becomes an object and acquires...its own...voice. ...this voice no longer casts (from itself) a shadow, for it expresses pure relationship” (Bakhtin 1986, p. 110). The shadow that this “pure relationship” does *not* cast is “a figural, substantive shadow”. Of course, with music we never seem able to escape *metaphor* completely, but we can go *behind* musical metaphors, that is, we can circumvent them (such as in thinking how the motional properties of music could be thought of as nonmetaphoric). In this a concept of musical consciousness helps us. Flickering somewhere between metaphor and directness, music’s consciousness is, as Cone argues, *implied* – but, if we think about music in certain ways, it could be (as it were) *literal*.

Conclusion

This paper has argued (Part 1) that we could think of musical motion as literal (and possibly motivated by some conscious agency). Having proposed this idea, it is then argued how at least some theories of biological consciousness (outlined in Part 2) are applicable to how music could be self-aware and active if it were conscious. These are theories describing conscious states derived from self-regulation. To think about how music could regulate itself, we need to think about reconceptualizing the notion of experience. Rosenberg (2004) defends the possibility of non-cognitive experience, which is called *panexperientialism*, by arguing that experience has an open-ended character consisting of a sliding scale from cognitive to noncognitive experiencing. Panexperientialism accepts that certain systems, such as people,

IS MUSIC CONSCIOUS?

mammals, fish, and birds, are conscious, but starts also to accept the consciousness of entities like insects and artificial systems, while recognizing that the consciousness of the latter is fuzzier. The sliding scale appears to taper off when it becomes incoherent to speak of entities whose cognitive capabilities are below a certain level as having experience, but it could just as well be that such entities, as experiential, do have coherence. Non-cognitive experience is qualitative – that is, presents distinct feelings and information about things – in ways very alien to us. It is analogous to the non-cognitive system in question as experience is to the human mind. Because there is no cognition associated with these experiences, the states they constitute are *protoconscious*. Kind (2006) and Nagasawa (2006) object that it is unclear how, without factoring in consciousness, we can make sense of the notion that there is a subject of experience. For experiences are not free floating, they must have subjects. But, as summarized in the “hard problem of consciousness” (Chalmers 1995, pp. 202-203), merely explaining the performance of cognitive and behavioural functions and processes accompanying experience does not explain why this performance results in experience. We cannot, therefore, know whether it follows from the consciousness allegedly resulting from such functions and processes that experience necessarily has a subject. If experience does not have to have a subject, this leaves the door open to other kinds of awareness that may be nonsubjective.

Music is conventionally thought of as being simply a series of sound events. As such it is not a continuant entity having subjective experience (defined as knowledge accumulating to a subject through cognition). However, our instinct is that music is somewhat more than this. It is intimately personal to us, and our

IS MUSIC CONSCIOUS?

engagement with it is as if with a personal consciousness. How therefore could music be thought of as a self-regulating awareness? This paper proposes that A-consciousness, which typically expresses propositional thought without there necessarily being phenomenal experience, could be thought of as applicable to music, as a form of consciousness that can include self-regulation. In the case of music, A-consciousness might be thought of as a form of consciousness that is available when it is not clear that there is a subject of experience. Fictionalist intentionalism, as explained by Livingston (2005) (the attitudes thought to be present in a work of art are not intentionally made manifest by anyone), is important here. Thinking of music as A-conscious, it could in the case of music be argued that propositional thought (the thought *that p*), which is characteristic of A-consciousness, does not necessarily have a subject in the standard sense (a subject that cognizes and has experience). An important way of looking at the thought *that p* is that it could be said to stand independently of a thinking subject because it consists just of this thought itself. On this basis, while it is not clear how music is an experiencing subject, conceiving it as capable of propositional thought then facilitates modes for it such as having a personality and using its personhood to author attitudes and thoughts. In this way, music would be able to seem in control of its own actions (*control consciousness*), to generate propositional thought (A-consciousness), to possess and use a self-concept (*self-consciousness*), and to perceive internally its own consciousness (*monitoring consciousness*). The agency of music would therefore arise because it is acting in all these different, self-regulatory ways, even though it may not be a subject and have experience in the standard sense. For

IS MUSIC CONSCIOUS?

example, the sense of momentum and structure we may feel from a large-scale musical work would be attributed to the sense that the music is in control of its own actions, which is characteristic of control consciousness.⁵

This paper explains the agency and animacy of music using an (as it were) threshold form of consciousness, A-consciousness, that can cooperate with P-consciousness. To argue that music is P-conscious as such may be near impossible according to the restrictions that, as Nagel (1974) says, impose themselves on our conceptualizations of consciousness. But (as Nagel also says), there are experiential facts beyond our conception that are yet accessible to us. In achieving this accessibility, hypothesizing a conceptual model of music as being A-conscious (the concept of *reflexivization*) could allow an explanation of the activities and functions music anthropomorphically performs as *animate agent*. Propositional attitudes are taken as an agential characteristic. We address the problem of music's not being an identifiable subject by theorizing for it a form of consciousness, A-consciousness, by which it can aspire to functions which, when performed, would result in experience. In a further step, thinking like this could allow us to conceive the possibility that music is an experiencing subject on a par with subjects at the top end of the cognitive-experiencing scale.

We describe what it is like to be music in terms of what it is like to be ourselves (that is, agential descriptions of music rely on biological parameters – for example, music goes up and down, swells and recedes). This paper explores how there is plausible reasoning to suggest that we can theorize what it would be like for music to be itself, by postulating *attitudinal* representational content and activity for

IS MUSIC CONSCIOUS?

it, as occurring in A-consciousness. As noted, for Block (1995) A-consciousness *interacts* with P-consciousness. In this regard it would be of benefit to define further the nature of the interaction between P-consciousness and A-consciousness and apply relevant analogies to an understanding of music as A-conscious, and of other hypothetical consciousnesses like machines (cf. Lewis & MacGregor, 2009). This would enable conceptualization of how, if music were conscious, its “higher” functions could include attributes such as sentience.

This paper does not discuss (1) how, if music hypothetically were conscious, its consciousness could apply in different kinds or genres of music, (2) how our perception of music would change if it were conscious, (3) the implications for the philosophy of mind of thinking music as conscious, (4) complete answers to the concerns of metaphorists who believe that musical motion is inevitably the product of metaphorical cognition, and (5) how, in detail, if music were conscious, this could be evidenced empirically. Nonetheless, the aim and hope is that this paper will foster further thinking about the nature of music that is complementary to that currently being undertaken to expand our ways of thinking about consciousness. In many ways we can describe music so as to attribute pseudo-consciousness to it. The thoughts of Nagel (1974) and certain ways in which we might think about music, such as those outlined here, suggest that the leap to attributing genuine consciousness to music may not be as fanciful as we might think. The challenge is to clarify the nature of that leap.

References

- Arico, A., Fiala, B., Goldberg, R. F., & Nichols, S. (2011). The folk psychology of consciousness. *Mind & Language*, 26(3), 327-352. <http://dx.doi.org/10.1111/j.1468-0017.2011.01420.x>
- Baars, B. J. (1994). A thoroughly empirical approach to consciousness. *Psyche*, 1(6), 1-18.
- Bakhtin, M. (1986). *Speech genres and other late essays*. Austin, TX: University of Texas Press.
- Barthes, R. (1968). La mort de l'auteur [The death of the author]. In: R. Barthes, *Le bruissement de la langue* [The murmuring of language] (pp. 61-67). Paris, France: Seuil.
- Block, N. (1990). Consciousness and accessibility. *Behavioral and Brain Sciences*, 13(4), 596-598.
- Block, N. (1995). On a confusion about a function of consciousness. *Behavioral and Brain Sciences* 18(2), 227-247.
- Byrne, A. (1997). Some like it HOT: consciousness and higher-order thoughts. *Philosophical Studies*, 86(2), 103-129.
- Casasanto, D. & Gijssels, T. (2015). What makes a metaphor an embodied metaphor? *Linguistics Vanguard*, 1(1), 327-337.
- Chalmers, D. (1995). Facing up to the problem of consciousness. *Journal of Consciousness Studies*, 2(3), 200-219.
- Cone, E. (1974). *The composer's voice*. Berkeley, CA: University of California Press.
- Cox, A. (1999). The metaphoric logic of musical motion and space. Unpublished PhD dissertation: University of Oregon.

IS MUSIC CONSCIOUS?

Crick, F., & Koch, C. (1990). Towards a neurobiological theory of consciousness.

Seminars in the Neurosciences, 2, 263-275.

Crosthwaite, J. (1985). The meaning of metaphors. *Australasian Journal of Philosophy*,

63(3), 320-335.

Davidson, D. (1978). What metaphors mean. *Critical Inquiry*, 5(1), 31-47.

Davies, S. (1984). Truth-values and metaphors. *The Journal of Aesthetics and Art*

Criticism, 42(3), 291-302.

Dove, G. (2011). On the need for embodied and dis-embodied cognition. *Frontiers in*

Psychology, 1(article 242), 1-13. <https://doi.org/10.3389/fpsyg.2010.00242>

Dretske, F. (2003). How do you know you are not a zombie? In: B. Gertler (Ed.),

Privileged access: philosophical accounts of self-knowledge (pp. 1-14). London, UK:

Routledge.

Eitan, Z., & Granot, R. (2006). How music moves. Musical parameters and listeners'

images of motion. *Music Perception*, 23(3), 221-248.

Frith, C., Perry, R., and Lumer, E. (1999). The neural correlates of conscious

experience: an experimental framework. *Trends in Cognitive Sciences* 3(3), 105-114.

Gamez, D. (2014). The measurement of consciousness: a framework for the scientific

study of consciousness. *Frontiers in Psychology*, 5(714), 1-15.

<http://dx.doi.org/10.3389/fpsyg.2014.00714>

Goldinger, S., Papesh, M., Barnhart, A., Hansen, W. & Hout, M. (2016). The poverty

of embodied cognition. *Psychonomic Bulletin & Review*, 23(4), 959-978.

Hatten, R. (2015). Melodic forces and agential energies: an integrative approach to

the analysis and expressive interpretation of tonal melodies. In: C. Maeder & M.

IS MUSIC CONSCIOUS?

Reybrouck (Eds.). *Music. Analysis. Experience. New perspectives in musical semiotics* (pp. 315-330). Leuven, Belgium: Leuven University Press.

Hobbes, T. (1996). Of persons, authors, and things personated. In: Hobbes, T., J. Gaskin (Ed.). *Leviathan* (pp. 106-110). Oxford, UK: Oxford University Press.

Hubbard, T. (2017). Momentum in music: musical succession as physical motion. *Psychomusicology: Music, Mind, and Brain*, 27(1), 14-30.

Johnson, M., & Larson, S. (2003). "Something in the way she moves" – metaphors of musical motion. *Metaphor and Symbol*, 18(2), 63-84.

Kassler, J. (1991). Editor's Preface. In: J. Kassler (Ed.). *Metaphor. A musical dimension* (pp. xi-xii). Sydney, Australia: Currency Press.

Kind, A. (2006). Panexperientialism, Cognition, and the Nature of Experience. *Psyche*, 12(5), 1-15.

Lakoff, G. & Johnson, M. (2003). *Metaphors we live by*. 2nd Edition. Chicago, IL: The University of Chicago Press.

Lewis, E., & MacGregor, R. (2010). A natural science approach to consciousness. *Journal of Integrative Neuroscience*, 9(02), 153-191.

<http://dx.doi.org/10.1142/S0219635210002202>

Livingston, P. (2005). *Art and intention: a philosophical study*. Oxford, UK: Clarendon Press.

Lloyd, D. (2011). Mind as music. *Frontiers in Psychology*, 2(article 63), 1-11.

<http://dx.doi.org/10.3389/fpsyg.2011.00063>

Lloyd, D. (2013). The music of consciousness: can musical form harmonize phenomenology and the brain? *Constructivist Foundations*, 8(3), 324-331.

IS MUSIC CONSCIOUS?

- Mahon, B. (2015). What is embodied about cognition? *Language, Cognition and Neuroscience*, 30(4), 420-429.
- Mandik, P. (2010). Control consciousness. *Topics in Cognitive Science*, 2(4), 643-657.
<http://dx.doi.org/10.1111/j.1756-8765.2010.01084>
- Maus, F. (1991). Music as narrative. *Indiana Theory Review*, 12, 1-34.
- McGlone, M. (2007). What is the explanatory value of a conceptual metaphor? *Language & Communication*, 27, 109-126.
- Miller, S. (1983). Motion in musical texture and aesthetic impact. *The Journal of Aesthetic Education*, 17(1), 59-67.
- Murphy, G. (1996). On metaphoric representation. *Cognition*, 60, 173-204.
- Murphy, G. (1997). Reasons to doubt the present evidence for metaphoric representation. *Cognition*, 62, 99-108.
- Nagel, T. (1974). What is it like to be a bat? *The Philosophical Review* 83(4), 435-450.
- Nagasawa, Y. (2006). A place for protoconsciousness. *Psyche*, 12(5), 1-8.
- Park, S. (2013). "Who are these people?": anthropomorphism, dehumanization and the question of the other. *Arcadia*, 48(1), 1-14. <http://dx.doi.org/10.1515/arcadia-2013-0006>
- Parncutt, R. & Kessler, A. (2007). Musik als virtuelle Person [Music as virtual person]. In: B. Oberhoff & S. Leikert (Eds.), *Die Psyche im Spiegel der Musik*. [The psyche as reflected in music.] (pp. 203-251). Gießen, Germany: Psychosozial-Verlag.
- Rosenberg, G. (2004). *A place for consciousness: probing the deep structure of the natural world*. New York, NY: Oxford University Press.
- Shoemaker, S. (1994). Phenomenal character. *Noûs*, 28(1), 21-38.

IS MUSIC CONSCIOUS?

Tarasti, E. (1991). Beethoven's Waldstein and the generative course. *Indiana Theory Review*, 12, 99-140.

Thumpston, R. (2015). The embodiment of yearning: towards a tripartite theory of musical agency. In: C. Maeder & M. Reybrouck (Eds.). *Music. Analysis. Experience. New perspectives in musical semiotics* (pp. 331-348). Leuven, Belgium: Leuven University Press.

Watt, R., & Ash, R. (1998). A psychological investigation of meaning in music. *Musicae Scientiae*, 2(1), 33-53.

¹ A review of extant general criticisms of CMT is beyond the scope of this paper.

CMT and embodied cognition (EC) (and its subarea embodied music cognition [EMC]) are interrelated programs. Queries about these programs have been raised in Murphy (1996, 1997), McGlone (2007), Dove (2011), Casasanto and Gijssels (2015), Mahon (2015), and Goldinger, Papesh, Barnhart, Hansen and Hout (2016).

² For contemporary support of Davidson's position see Davies (1984) and Crosthwaite (1985).

³ What Block (1995) most likely means by "sensation" is the *mental state* arising when any of the senses are stimulated or from the condition of a part of the body.

"Feeling", it appears, refers to the *action* of experiencing a sensation occasioned by a stimulus.

⁴ Byrne (1997, p. 105) notes: "there is nothing *in general* that it is like to have a conscious thought – that is, conscious thoughts need not be phenomenal – so some other sense of consciousness is required. And perhaps access consciousness fits the bill" (my italics). In the account that follows, the overall hypothesis is that access consciousness, despite its not *generally* being associated with what-it-is-like-ness (phenomenality), could provide insight into what it would be like for music (which is conventionally deemed not to have experience) to be itself, if it were conscious.

⁵ In a recent review article, Hubbard (2017, p. 25) concludes that music may have a unique, specific "momentum-like effect" which derives from musical motion.

Hubbard explains momentum-like effects as kinds of experience in which general senses of momentum, which occur in phenomena, are somehow perceptually

extended in terms of their qualitative or quantitative aspects. For example, *representational momentum* is a momentum-like effect referring to the tendency to remember a moving target as having travelled further along its direction of travel than it actually did. In terms of the present discussion, some of the details of a specifically musical momentum as a new momentum-like effect might be utilized in conceiving musical momentum as actual and a component of music's conscious sense of control over itself. In similarity to arguments outlined in Part 1 of this paper, this would involve reappraising metaphorical thinking as applied to the case of musical motion.